

**Model:TLLA0.01G18G-30-40**
**Low Noise Amplifier**
**0.01-18GHz, NF:3.0 dB, Gain:30 dB,P1dB:24dBm**
**Feature:**

- Ultra Wide Band: 0.01-18GHz
- Gain: 28 dB Min
- Noise Figure: 3.0 dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**电气特性 Electrical:**

参数Parameter	Min.	Typ.	Max.	单位Units
频率范围 Frequency range	0.01-18			GHz
增益 Gain	28	33	35	dB
增益平坦度 Gain Flatness		±2.0	±2.5	dB
噪声系数 Noise Figure		3.0	4.0	dB
线性输出功率Output P1dB	20	26		dBm
输出三阶交调Output IP3		32		dBm
输入驻波 Input VSWR		1.4	1.8	:1
输出驻波 Output VSWR		1.6	2.0	:1
直流电压 DC Voltage		+12		V DC
直流电流 DC Supply Current		380		mA
阻抗 Impedance	50			Ohms

**机械特性 Mechanical :**

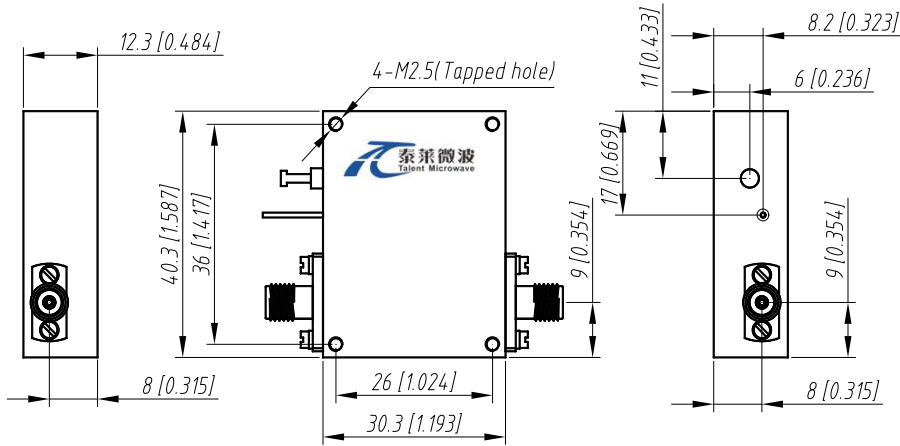
参数Parameter	指标 Value	单位Units
输入输出接口Input /Output Connector	SMA Female	
直流偏置 Bias	Solder Pin	
尺寸 Size	40*30*12	mm
重量 Weight	75	g


**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+15
输入功率 RF INPUT POWER	+2 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

**外形尺寸 Outline Drawing:**

Unit: mm(Inches)



**\*\*\*Heat Sink Required During Operation**



**温度环境 Environmental Conditions:**

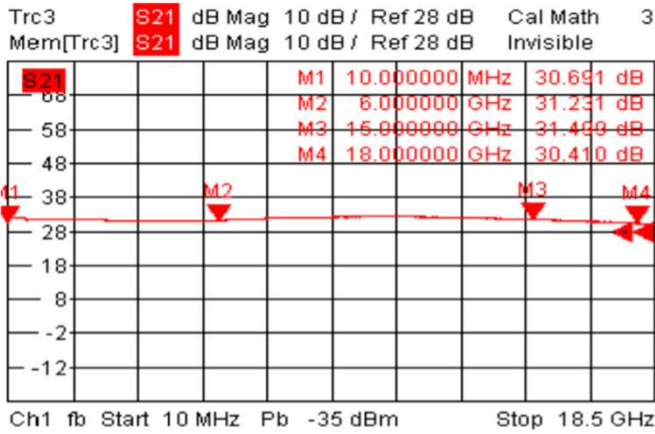
参数Parameter	Min.	Typ.	Max.	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude		50,000		feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

**订货信息 Ordering Information:**

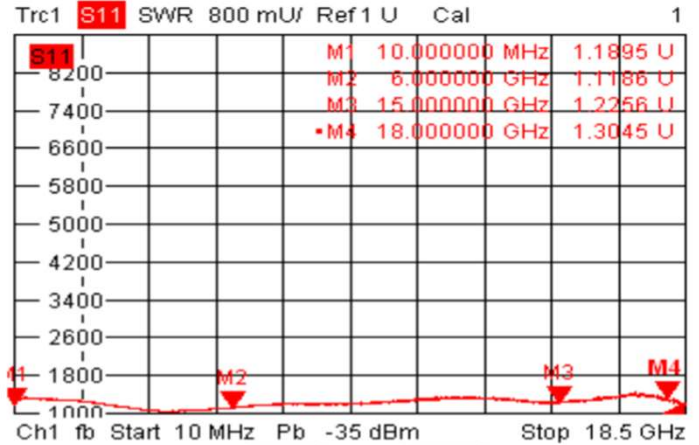
标准型号 Part Number	描述 Description	版本号Revision
TLLA0.01G18G-30-40	Low Noise Amplifier 0.01-18GHz, NF:3.0 dB, Gain:30 dB,P1dB:24dBm,12V DC,Without Heatsink	Rev.1.1
TLLA0.01G18G-30-40-HS	Low Noise Amplifier 0.01-18GHz, NF:3.0 dB, Gain:30 dB,P1dB:24dBm,12V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

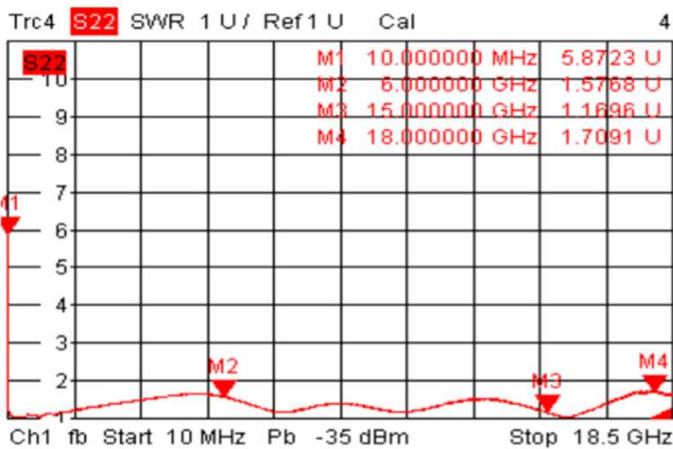
Gain



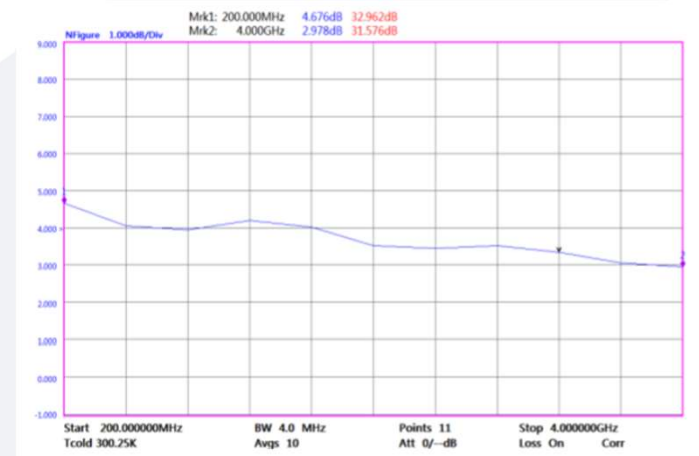
Input Return Loss



Output Return Loss



Noise Figure(0.2-4GHz)



Noise Figure(4-18GHz)

